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CRT Item Writing Team

Grade 3 CRT Item Specifications

Prioritized Standards		Knowledge/Skills Assessed	Item Specifications
1.3.1 Immediately recall and use addition and subtraction facts and multiplication facts through 81. (C)	Concepts	1.3.1 Immediately recall addition and corresponding subtraction facts (sums to 24) and multiplication facts through 81.	1.3.1 Multiplication facts limited to 9 x 9.
1.3.2 Add and subtract multi-digit		1.2.5 Use patterns to skip count.	1.2.5 Skip counting must begin at the first multiple of the number.
numbers with regrouping. (P) 1.3.3 Generate and solve two-step		1.3.8 Model, and identify place value positions up through 9,999.	1.3.8 Identify numerical place-values. Represent a standard-form numeral in expanded form and vice-versa. Use models to identify place value, e.g. (base ten blocks)
addition and subtraction and one- step multiplication problems based on practical situations, using paper		1.3.9 Identify fractions using models, words and numerals.	
and pencil, mental computation, and estimation. (PS)	70	1.3.2 Add and subtract multi-digit numbers with regrouping	1.3.2 Sums limited to 999. Whole numbers limited to 0 – 999 for subtraction.
Add and subtract decimals using money as a model. (P, PS) 1.2.5	Procedures	1.3.4 Add and subtract decimals using money as a model.	1.3.4 Straight computation, (Sums limited to 999. Whole numbers limited to 0 – 999 for subtraction.), without context.
Use patterns in numbers to skip count. (C, P) 1.3.8	Pro	1.2.5 Use patterns to skip count.	1.2.5 Skip counting must begin at a multiple of the number other than the first multiple of the number.
Use, model, and identify place value positions up to 10, 000. (C) 1.3.9 Model, sketch, and label fractions with denominators to 10; write fractions with numerals and number words. (C)	Solving	1.3.3 Generate and/or solve two-step addition and subtraction and one-step multiplication problems based on practical situations.	1.3.3 Addition and corresponding subtraction facts limited to sums to 18. Multiplication limited to facts 1 - 81. Items may contain a representation (graphic). No combinations of addition and subtraction.
	Problem	1.3.4 Add and subtract decimals using money as a model.	1.3.4 Items must have context

Grade 3 CRT Item Specifications "Enduring and Important Knowledge" identified in previous grade-levels may be included within the context of some problems.

Prioritized Standards		Knowledge/Skills Assessed	Item Specifications	
2.3.1 Recognize, describe, and create patterns using numbers; use number patterns and their extensions to solve problems. (C, P, PS)	Concepts	2.3.1 Recognize and complete a pattern using numbers.2.3.3 Identify missing numbers in open number sentences involving number facts in addition and subtraction.	 2.3.1 Patterns must include at least four given terms. Item asks to identify the missing term within the pattern. Limited to addition and subtraction (one operation only), up to 100. May be placed in context. 2.3.3 Addition and corresponding subtraction facts limited to sums to 24. Limited to one operation only, no variables. 	
2.3.3 Identify missing terms and missing numbers in open number sentences		2.3.4 Complete number sentences with the appropriate symbols to compare two numbers.	2.3.4 Items may ask students to compare two basic number facts. (Example: $2 + 4 \square 6 + 4$)	
involving number facts in addition and subtraction. (C) 2.3.4 Complete number sentences with the appropriate words and symbols for addition, subtraction, less than, greater than, and equal to (+, -, <, >, =). (C, P)	Procedures	 2.3.1. Recognize and extend a pattern using numbers. 2.3.4 Complete number sentences with the appropriate symbols for addition, subtraction, less than, greater than, and equal to (+, -, <, >, =, ^). 	 2.3.1 Pattern must include at least three repetitions. Patterns should only increase and not extend beyond 100. Items should ask students to extend to the next term only. Limited to addition and subtraction (one operation only). May be placed in context. 2.3.4 Sums limited to 999. Whole numbers limited to 0 – 999 for subtraction. 	
	Problem Solving	2.3.1 Generate a rule to describe a pattern.	2.3.1 Rule may be given using words or symbols, e.g. (+ 3 or add three). Students may be asked identify the pattern from a given pattern. Limited to addition and subtraction (one operation only), up to 100. May be placed in context.	

Grade 3 CRT Item Specifications

Prioritized Standards		Knowledge/Skills Assessed	Item Specifications
3.3.2 Select and use appropriate units of measurement; measure to the		3.3.2 Select appropriate unit of measurement.	3.3.2 Items should ask students to select units that are appropriate for measuring temperature, weight (mass), capacity, time and length.
required degree of accuracy, and record results. (C, P) 3.3.4 Read, write, and use money notation determining the possible	Concepts	3.3.4 Read and write money amounts using money notation.	3.3.4 Given the graphic of money or the description, students will give the amount using money notation.
		3.3.6 Tell time to the nearest minute, using analog and digital clocks.	3.3.6 Items must include a representation of a clock.
combinations of coins and bills to equal given amounts. (C, P)		3.3.2 Measure to the required degree of accuracy.	3.3.2 Items will ask students to read a thermometer to a given degree, length to centimeters and inches.
3.3.6 Tell time to the nearest minute, using analog and digital clocks, and identify elapsed time. (C, P, PS)	Procedures	3.3.4 Use money notation to determine the possible combinations of coins and bills to equal a given amount.	3.3.4 Given the money value, students find combinations of bills and coins (may be given as diagrams or descriptions).
		3.3.6 Identify elapsed time.	3.3.6 Items must include start time and amount of elapsed time. Students must calculate the end time. Start time must be represented on a clock.
	Problem Solving	3.3.6 Identify elapsed time.	3.3.6 Items must include a representation of both start and finish time on two clocks. Item must ask students to calculate the elapsed time.
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Grade 3 CRT Item Specifications

Prioritized Standards		Knowledge/Skills Assessed	Item Specifications
 4.3.1 Describe, sketch, compare, and contrast plane geometric figures. (C) 4.2.2 Compare the size (larger and smaller) of similar two-dimensional shapes; identify congruent shapes. (C) 	Concepts	 4.3.1 Identify, compare and contrast plane geometric figures. 4.2.2 Compare the size of similar two-dimensional shapes; identify congruent shapes. 4.2.4 Identify and name three-dimensional figures and objects. 	 4.3.1 Item can include the following geometric figures: circle, triangle, rectangle, square, rhombus and trapezoid. 4.2.2 The figures used must be similar. All dimensions of larger figures must be larger and all dimensions of smaller figures must be smaller. Students will identify congruent (figures with the same size and shape), shapes by their appearance only. 4.2.4 Item can include the following three-dimensional figures: cube and sphere only.
4.2.4 Identify, name, sort, and describe, two- and three- dimensional geometric figures and objects. (C, P, PS)	Procedures	4.2.4 Sort two- and three-dimensional figures and objects.	4.2.4 Item can include the following three-dimensional figures: cube and sphere only. Figures limited to: circle, triangle, rectangle, square, rhombus and trapezoid.
	Problem Solving	4.2.4 Describe two- and three-dimensional geometric figures and objects.	4.2.4 Students may be asked to describe a shape used in a problem solving situation or name a shape based on the description used in a problem solving situation. No diagram will be provided. Figures limited to: circle, triangle, rectangle, square, rhombus and trapezoid.

Grade 3 CRT Item Specifications

Prioritized Standards	. <u>.</u>	Knowledge/Skills Assessed	Item Specifications
5.3.1 Collect, organize, display, and describe simple data using number lines, pictographs, bar graphs, and frequency tables. (C, P, PS) 5.3.2 Use concepts of probability (e.g.,	Concepts	5.3.1 Describe simple data using number lines, pictographs, bar graphs, and frequency tables.5.3.2 Predict the outcome of an event as impossible, likely, unlikely, or certain.	5.3.1 Items must ask a single question about a data display. (e.g. How many students chose blue as their favorite color?)
impossible, likely, unlikely, certain) to make predictions about future events. (C)		5.3.1 Organize, and display simple data using number lines, pictographs, bar graphs, and frequency tables.	5.3.1 Items must ask student to select the correct display given data.
	Procedures		
	Problem Solving	5.3.1 Collect, organize, display, and describe simple data using number lines, pictographs, bar graphs, and frequency tables.	5.3.1 Items should ask students to solve problems based on a data display. (e.g. Only classes with more than 20 students will go on the field trip. Which class will not go?)